

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in this application.

LISTING OF CLAIMS:

1. (Currently Amended) A method of forming a shadowgraph image of a
glazing ~~an object~~ comprising:
illuminating the glazing with a light source to form a shadowgraph ~~forming the~~
~~image of the glazing as a virtual image~~ on a virtual image plane; and
focusing a camera onto the virtual image plane.
2. (Currently Amended) A method of forming a shadowgraph image as
claimed in claim 1, wherein the illumination of the glazing with the light source
comprises ~~[[by]]~~ illuminating the object glazing with a collimated light beam from a
localised light source ~~to create a shadowgraph image on the virtual image plane.~~
3. (Currently Amended) A method as claimed in claim 1 wherein the virtual
image plane is positioned behind the ~~object~~ glazing so that the glazing is positioned
between the light source and the virtual image plane.
4. (Currently Amended) A method as claimed in claim 1 wherein the ~~virtual~~
~~image plane is positioned in front of the object~~ wherein the focusing of the camera
onto the virtual image plane comprises focusing onto the virtual image a CCD

camera which records the shadowgraph image of the glazing that is stored in a computer associated with the CCD camera.

5. (Currently Amended) A method of forming a shadowgraph as claimed in claim 2 further comprising tilting wherein a wedge prism is used to tilt the virtual image plane through use of a wedge prism positioned between the camera and the virtual image plane.

6. (Previously Presented) A method of forming a shadowgraph image as claimed in claim 2 wherein the light source is an LED.

7. (Previously Presented) A method as claimed in claim 2 wherein the light is collimated by a lens optical system.

8. (Previously Presented) A method as claimed in claim 2 wherein the light is collimated by a mirror optical system.

9. (Currently Amended) A method as claimed in claim 1 wherein the ~~object~~ is a glazing is illuminated under ambient light conditions.

10. (Currently Amended) A method of determining the optical quality of a glazing which includes at least one area having a reduced light transmission comprising ~~the following steps:~~

producing a shadowgraph image of the glazing as claimed in claim 1;

measuring the illumination of the glazing at a plurality of measurement points arranged in an array extending over the glazing;

determining any deviation in illumination at those points from a desired value at each value at each point;

wherein the at least one area of reduced light transmission is omitted from the array of measurement points.

11. (Currently Amended) A method to determine the optical quality of glazing comprising ~~the following steps~~:

illuminating the glazing with a localized light source to produce a shadowgraph image as claimed in ~~[[.]]~~ claim 1;

recording the shadowgraph image;

determining valid measurement points of the shadowgraph image which excludes those points which correspond to obscured areas of the glazing;

processing the recorded shadowgraph image to determine an illumination value for each valid measurement point;

constructing a reference image by scanning a convolution window point by point over the ~~processessed~~ processed image and using a convolution filter to calculate a reference illumination value at points of the reference image which correspond to each point of the processed image by averaging the illumination values of the valid measurement points of the processed image covered by the convolution window;

comparing the illumination value of each valid measurement point of the processed shadowgraph image with corresponding points of the reference image to determine the optical quality of the glazing.

12. (Original) A method as claimed in claim 11 wherein the convolution window is of constant area during the scanning operation.

13. (Currently Amended) A method as claimed in claim 10 including the step of recording the reference image for comparison with the processed image.

14. (Currently Amended) A method as claimed in claim 11 wherein a valid measurement point is one in which the illumination value at that point is equal to or above a pre-set ~~thereshold~~ threshold.

15. (Previously Presented) A method as claimed in claim 11 wherein when the point of the convolution window for which the reference illumination is being calculated corresponds with a non-valid measurement point of the processed image, a reference illumination is not calculated.

16. (Previously Presented) A method as claimed in claim 11 wherein non-valid measurement points are not taken in account in the construction on the reference image.

17. (Previously Presented) A method as claimed in claim 11 wherein the same light source is used for the production of the shadowgraph image and in relation to calculating the reference image.

18. (Canceled)

19. (New) A method of forming a shadowgraph image of a glazing comprising:

illuminating the glazing with light from a light source to form a virtual shadowgraph image of the glazing on other than a screen; and

sampling light intensity of the virtual shadowgraph image through use of a camera.

20. (New) A method as claimed in claim 19 wherein the glazing is illuminated under ambient light conditions, and the virtual shadowgraph image of the glazing is formed on a virtual image plane.

21. (New) A method as claimed in claim 19 wherein the light from the light source is collected by passing the light from the light source through a lens positioned between the glazing and the camera, and the light intensity of the virtual shadowgraph image is sampled by focusing the camera on the virtual shadowgraph image through the lens.